

CRATE

GFX50

TWO TONE

*DUAL INPUT GUITAR AMPLIFIER
with DIGITAL SIGNAL PROCESSING*



OWNER'S MANUAL

Congratulations!

You are now the proud owner of the Crate GFX50 TwoTone guitar amplifier. This unique amplifier allows two guitarists to play simultaneously, making it perfect for students, band practices, and live performances. An easy to operate DSP section lets you dial in a variety of digital effects such as delay, flange, chorus and reverb. RCA inputs with a level control allow you to play along with a compact disc, a tape, or a drum machine.

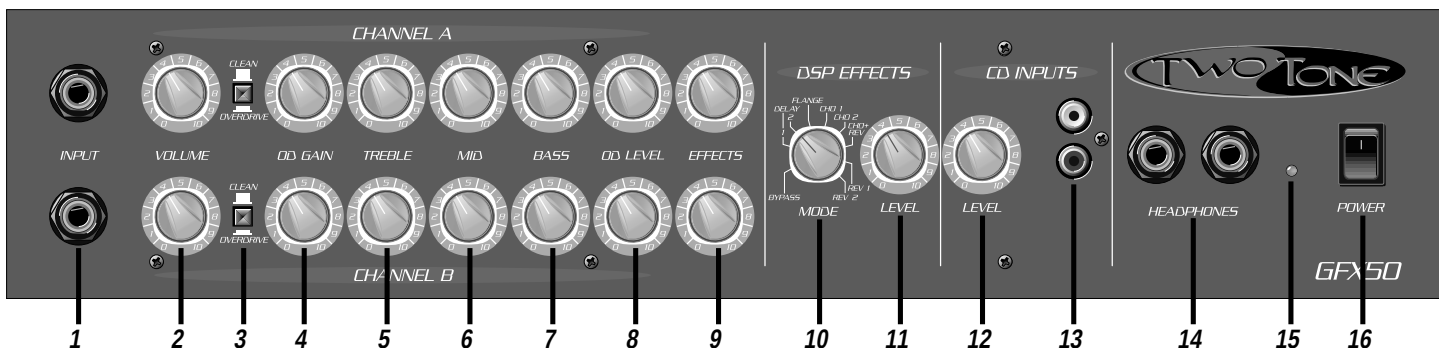
Your GFX50 is Musician Made in the U.S.A., using only the best components. Extensive testing at the hands (and ears) of skilled technicians and musicians insures you that this amplifier is the absolute best it can be.

In order to get the most out of your new amplifier, we strongly urge you to go over the information contained in this manual before you begin playing.

And **thank you** for choosing **CRATE**

CRATE GFX50 TwoTone Guitar Amplifier with DSP

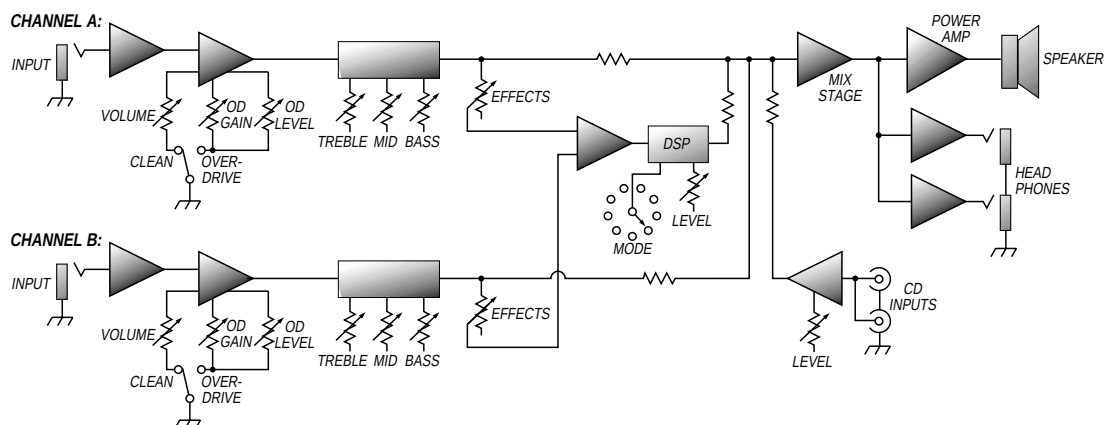
The Front Panel:



Channel A and B are independent of each other up to the DSP and CD inputs. The text below (#1-9) applies to both channels.

1. **INPUT:** Connect the output signal from your guitar here by means of a shielded instrument cable.
2. **VOLUME:** Use this control to set the clean channel's output signal level.
3. **CLEAN/OVERDRIVE:** Use this switch to select the clean channel (switch in the out position) or the overdrive channel (switch depressed).
4. **OD GAIN:** Use this control to set the overdrive channel's input signal gain. This control works in conjunction with the level control (#8) to set the amount of distortion and the output signal level of the overdrive channel.
5. **TREBLE:** Use this control to adjust the high frequency level of the output signal. This control has a range of 27dB of boost or cut at 12kHz.
6. **MID:** Use this control to adjust the midrange frequency level of the output signal. This control has a range of 20dB of boost or cut at 1.5kHz.
7. **BASS:** Use this control to adjust the low frequency level of the output signal. This control has a range of 28dB of boost or cut at 40Hz.
8. **OD LEVEL:** Use this control to set the overdrive channel's output signal level. (Works in conjunction with the gain control, #4.)
9. **EFFECTS:** Use this control to set the amount of DSP effects applied to the output signal.
10. **DSP MODE:** Use this control to select the type of digital signal processing effect(s) applied to the output signal. Each effect and its location is called out by the markings around the control. The effects are as described as follows:
 - BYPASS:** No effect
 - DELAY 1:** Short delay effect
 - DELAY 2:** Long delay effect
 - FLANGE:** Light flanging effect
 - CHO 1:** Slow chorus effect
 - CHO 2:** Fast chorus effect
 - CHO+REV:** Slow chorus effect with reverberation
 - REV 1:** Small room reverberation
 - REV 2:** Large hall reverberation
11. **DSP LEVEL:** Use this control to set the amount of digital effect applied to the output signal.
12. **CD INPUTS LEVEL:** Use this control to adjust the level of the signal applied to the CD input jacks (#13).
13. **CD INPUT JACKS:** Use these jacks to connect the output of a CD or tape player to the amp. (The jacks are internally summed to create a mono signal.)
14. **HEADPHONES:** Use these jacks to connect one or two pairs of stereo headphones to the amplifier. When the headphones are used, the internal speaker is disconnected.
15. **LED:** This LED illuminates when the amplifier is on.
16. **POWER:** Use this switch to turn the amplifier on and off. The amplifier is on when the top of the switch is depressed; off when the bottom of the switch is depressed.
17. **AC LINE CORD(rear panel, not shown):** Plug this cord into a properly wired, grounded, 120 volt, 60 cycle AC outlet. **DO NOT attempt to defeat the ground connection of this power cord!** If your amplifier was purchased outside of the United States, see the unit's rear panel labeling for its power rating, and follow the above guidelines.

System Block Diagram:



CRATE GFX50 TwoTone Guitar Amplifier with DSP

Some Suggested Settings:

CRYSTAL CLEAN:



PUNCHY CLEAN:



DIRTY PUNCH:



DIRTY BLUES:



EDGIE:



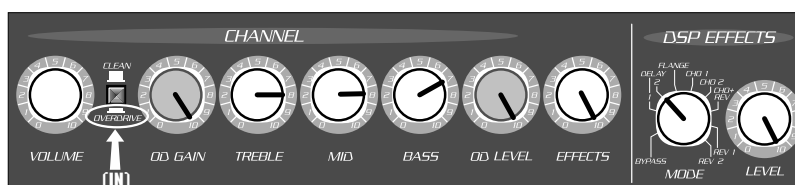
SWEATY METAL:



ARENA METAL:



MAMMOTH METAL:



CRATE GFX50 TwoTone Guitar Amplifier with DSP

GFX50 TECHNICAL SPECIFICATIONS

Output Power Rating	50 watts RMS @ 5% THD 4 ohm load
Maximum Input Signal Level Accepted	2.3 volts, peak-to-peak
Total System Gain	Overdrive Channel: 93dB all controls @10 Clean Channel: 50dB all controls @10
Input Impedance	270k ohms
Tone Controls (Overdrive/Clean)	Bass: 28dB range @ 40Hz Mid: 20dB range @ 1.5kHz Treble: 27dB range @ 12kHz
CD Inputs	Maximum signal level 7.75V rms
Headphones	Minimum impedance 32 ohms
Internal Speaker	12" Crate Custom, 4 ohms, 1.5" voice coil, 30 oz. magnet
Input Power Requirements	120 VAC, 60Hz, 75VA 100/115VAC, 50/60Hz, 75VA 230VAC, 50/60Hz, 75VA
Cabinet Size and Weight	19" H x 19-3/8" W x 9-1/2" D, 28 lbs.

Crate continually develops new products, as well as improves existing ones. For this reason, the specifications and information in this Crate manual are subject to change without notice.

 CAUTION  RISK OF ELECTRIC SHOCK DO NOT OPEN	 PRECAUCION  RIESGO DE CORRIENTAZO NO ABRA	 ATTENTION  RISQUE D'ELECTROCUTION NE PAS OUVRIR	 VORSICHT  ELEKTRISCHE SCHLAGGEFAHR NICHT OFFENEN																								
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	PRECAUCION PARA DISMINUIR EL RIESGO DE CORRIENTAZO NO ABRA LA CUBIERTA. NO HAY PIEZAS ADENTRO QUE EL USUARIO PUEDA REPARAR. DEJE TODO MANTENIMIENTO A LOS TECNICOS CALIFICADOS.	ATTENTION: POUR REDUIRE D'ELECTROCUTION NE PAS ENLEVER LE COUVERCLE. AUCUNE PIECE INTERNE N'EST REPARABLE PAR L'UTILISATEUR. POUR TOUTE REPARATION, S'ADRESSER A UN TECHNICIEN QUALIFIE.	VORSICHT: ZUR MINIMIERUNG ELEKTRISCHER SCHLAGGEFAHR NICHT DEN DECKEL ABERHEIMEN. INTERNE TEILE KONNEN NICHT VOM BENUTZER GEWARTET WERDEN. DIE WARTUNG IST QUALIFIZIERTEM WARTUNGSPERSONAL ZU UBERLASSEN.																								
THIS EQUIPMENT HAS BEEN DESIGNED AND ENGINEERED TO PROVIDE SAFE AND RELIABLE OPERATION. IN ORDER TO PROLONG THE LIFE OF THE UNIT AND PREVENT ACCIDENTAL DAMAGES OR INJURY, PLEASE FOLLOW THESE PRECAUTIONARY GUIDELINES:	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT OPEN CHASSIS; DO NOT DEFEAT OR REMOVE THE GROUND PIN OF THE POWER CORD; CONNECT ONLY TO A PROPERLY GROUNDED AC POWER OUTLET.	WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE. CAUTION: NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	CAUTION: OUR AMPLIFIERS ARE CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS. CONTINUED EXPOSURE TO HIGH SOUND PRESSURE LEVELS CAN CAUSE PERMANENT HEARING IMPAIRMENT OR LOSS. USER CAUTION IS ADVISED AND EAR PROTECTION IS RECOMMENDED IF UNIT IS OPERATED AT HIGH VOLUME.																								
ESTE APARATO HA SIDO DISEÑADO Y CONSTRUÍDO PARA PROVEER AÑOS DE OPERACIÓN SEGURA Y CONFIABLE. PARA PROLONGAR LA VIDA DE ESTA UNIDAD E IMPEDIR DAÑOS ACCIDENTALES POR FAVOR SIGA ESTAS INSTRUCCIONES PREVENTIVAS:	PRECAUCION: PARA DISMINUIR EL RIESGO DE DESCARGAS ELÉCTRICAS: (1) NO ABRA LA CUBIERTA, (2) NO ES RECOMENDABLE REMOVER O DESACTIVAR LA PATA DEL POLO A TIERRA DEL CABLE DE CORRIENTE. CONECTE CORRECTAMENTE A UNA TOMA DE CORRIENTE A TIERRA.	ADVERTENCIA: PARA EVITAR DESCARGAS ELÉCTRICAS O PELIGRO DE INCENDIO, NO DEJE ESTE APARATO EXPUESTO A LA LLUVIA O HUMEDAD. PRECAUCION: NO HAY PIEZAS ADENTRO QUE EL USUARIO PUEDA REPARAR. DEJE TODO MANTENIMIENTO A LOS TÉCNICOS CALIFICADOS.	PRECAUCION: NUESTROS AMPLIFICADORES PUEDEN PRODUCIR NIVELES DE PRESION DE SONIDO ALTO. EXPOSICION CONTINUADA A LOS NIVELES DE PRESION DE SONIDO ALTO PUEDE CAUSAR DAÑO PERMANENTE A SU OIDO. ES ACONSEJADO QUE USE PRECAUCION AL USUARIO Y ES RECOMENDADO PROTECCION PARA LOS OIDOS SI LA UNIDAD ES OPERADA A VOLUMEN ALTO.																								
THE CHART BELOW SHOWS THE U.S. GOVERNMENT'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS WHICH WERE IN EFFECT AT THE TIME OF THIS PUBLICATION FOR PERMISSIBLE NOISE EXPOSURE, PER 29CFR1910.95, TABLE G-16:																											
<table border="1"><thead><tr><th>SOUND LEVEL DBA, SLOW RESPONSE</th><th>DURATION PER DAY IN HOURS</th></tr></thead><tbody><tr><td>90</td><td>8</td></tr><tr><td>92</td><td>6</td></tr><tr><td>95</td><td>4</td></tr></tbody></table>	SOUND LEVEL DBA, SLOW RESPONSE	DURATION PER DAY IN HOURS	90	8	92	6	95	4	<table border="1"><thead><tr><th>SOUND LEVEL DBA, SLOW RESPONSE</th><th>DURATION PER DAY IN HOURS</th></tr></thead><tbody><tr><td>97</td><td>3</td></tr><tr><td>100</td><td>2</td></tr><tr><td>102</td><td>1 - 1 1/2</td></tr></tbody></table>	SOUND LEVEL DBA, SLOW RESPONSE	DURATION PER DAY IN HOURS	97	3	100	2	102	1 - 1 1/2	<table border="1"><thead><tr><th>SOUND LEVEL DBA, SLOW RESPONSE</th><th>DURATION PER DAY IN HOURS</th></tr></thead><tbody><tr><td>105</td><td>1</td></tr><tr><td>110</td><td>1/2</td></tr><tr><td>115</td><td>1/4 or less</td></tr></tbody></table>	SOUND LEVEL DBA, SLOW RESPONSE	DURATION PER DAY IN HOURS	105	1	110	1/2	115	1/4 or less	
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EXPLANATION OF GRAPHICAL SYMBOLS: EXPLICACION DE SIMBOLOS GRAFICOS:	 = "DANGEROUS VOLTAGE" "VOLTAJE PELIGROSO" "DANGER HAUTE TENSION" "GEFAHRICHE SPANNUNG"	 = "IT IS NECESSARY FOR THE USER TO REFER TO THE INSTRUCTION MANUAL." "ES NECESARIO QUE EL USUARIO SE REFIERA AL MANUAL DE INSTRUCCIONES." "REFERREZ-VOUS AU MANUAL D'UTILISATION" "UNBEDINGT IN DER BETRIEBUNGSANLEITUNG NACHSCHLAGEN"																									

The GFX50 is covered with a durable black Tolex material: wipe it clean with a lint-free cloth. Never spray cleaning agents onto the cabinet. Avoid abrasive cleansers which could damage the finish.

CRATE

www.crateamps.com

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